

```
int ledPin = 9;  
int brightness = 0;
```

```
void setup(){  
  Serial.begin(9600);  
  pinMode(ledPin, OUTPUT);  
}
```

```
void loop(){  
  int sensorValue = analogRead(A0);  
  Serial.println(sensorValue);  
  analogWrite(ledPin, brightness);  
  brightness = map(sensorValue,0,1024,0,255);  
  analogWrite(ledPin,brightness);  
  delay(1);  
}
```